THE INSTITUTIONAL INVESTORS' BEHAVIOUR UNDER THE IMPACT OF THE GLOBAL FINANCIAL CRISIS

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Abstract:

On the subject of financial globalization a lot of literature has been written, annalyzing all sorts of effects it had. Still, the changes induced by globalization at the level of the financial markets are not always clear. The veritable flooding of capitals, constantly moving, created a continuous game of investment opportunities, of arbitration possibilities and funding sources, made institutional investors adopt various attitudes, the role of institutional investors in the activation of capital markets being sustained by the financial globalization and the extension of multinational financial groups, on one side, and by the increased performance of the share and bond markets, on the other side.

By the present paper, we propose to underline the behaviour of the main institutional investors (mutual funds, pension funds and hedge funds) under the impact of the current global financial crisis, the modifications which intervened in asset assignment and investment relocation, showing that the instability generated in the global financial system had immediate effects on all the portfolios of institutional investors, regardless of their classification category.Under conditions of capital flow increase, adjusted by the global financial crisis, the presented analysis and empirical proofs show a tendency of institutional investors' asset reallocation on developed markets and the withdrawal from the emergent ones.

Keywords: *institutional investors,mutual funds, pension funds, hedge funds, financial crisis*

JEL codes: *G11, G23*

1. Introduction

The last decades brought major structural and functional changes to the global economy, the economic and financial globalization phenomenon leading to the transformation of the contemporary financial environment, by means of the interdependence increase of financial areas, the important mobility of capital flows and the concentration of financial activities in areas deemed as favorable by the investors.

This veritable flooding of capitals, constantly moving, created a continuous game of investment opportunities, of arbitration possibilities and funding sources, game in which institutional investors are important players.

The factors which contributed to such dynamics are mainly of structural nature, like: (i) the increase of investment opportunities; (ii) the opening of various economies towards foreign investors; (iii) the gap of interest rates on capital markets; (iv) the regulations' allowance degree.

In this context, the role of institutional investors in the activation of capital markets was sustained by the financial globalization and the extension of multinational financial groups, on one side, and by the increased performance of the share and bond markets, on the other side.

The field literature comprises a multitude of studies on the institutional investors' behaviour in situations of financial turbulence and their impact on the exchange market volatility, but the results are, often, contradictory.

Relevant in this sense are the studies performed by the US Federal Reserve, the Investment Company Institute, respectively. In the first study, performed in 2000, US Federal Reserve shows that the American mutual funds do not have a destabilizing effect on exchange markets. On the other side, Investment Company Institute, in its study on the mutual fund movement since 1944 until now, shows that investment funds recorded a contribution growth during the market high performance periods and significant outputs during market adjustment periods.

In other authors' opinion, the pension funds and other important institutional investors could contribute to the stabilization of the financial system (Davis and Steil, 2001). Through the regulation, organization and operation method, there are significant differences in the elaboration and implementation of the investment strategy and the assets' assignment to institutional investors. Thus, as opposed to mutual funds and hedge funds, pension funds do not experience the sudden withdrawals of individual investors, the long-term investment horizon allowing them ,,to beat the wind and wait for asset price adjustment to justified levels by economic structures (Froot et al., 2001).

Another study states the fact that institutional investors by means of resource drawing and assigment contribute to the increase of liquidities on the financial markets, the introduction of new financial tools and products, the development of transaction strategies, of arbitration, the cross-border diversification of portfolios with direct effects on the economic environment (Harichandra, K, Thangavelu, S, 2004).

The authors Channarith Meng and Wade Donald Pfau (2010) in their study performed on a number of 32 mature and emergent markets, during 2003-2007, show that the impact of pension funds on the exchange markets is significantly different from one country to another, according to the financial system development level. On the short term, the countries with developed financial systems can gain significant benefits, represented by the increase of the exchange market capitalization of the operated volume under the impact of investments from pension funds, meanwhile the estimated benefits for countries with less developed financial systems are less sustainable.

Regarding the hedge funds, their positive effect on the exchange markets is due to the increase and type of the instruments processed on such markets (Sławiński, A, 2006).

The empirical proofs related to the hedge funds involvement in the recent financial crises are mixed (Eichengreen and Mathieson, 1998; Fung et al, 2000.), the biggest controversy being associated to the exchange rate operation by the hedge funds through short selling (without coverage in financial assets) which can lead to price fluctuation on capital markets (White, 2006).

We hereby propose to underline the behaviour of the main institutional investors (mutual funds, pension funds and hedge funds) under the impact of the current global financial crisis, the modifications which intervened in asset assignment and investment relocation.

2. Empirical proofs of institutional investors' behaviour

The effects of the financial globalization can also be felt in the institutional investors' dynamics, which, due to the professional management, the easy access to informational ressources and the dispersion capacity of risks, have the opportunity to diversify portfolios at the same time with their globalization, a rather difficult approach in case of idividual investors.

In this context, we propose to analyze the institutional investors' dynamics, the modifications which occured in the regional and structural asset assignment during the pre-crisis period and along the current global financial crisis.

In case of mutual funds, they offer the advantage of portfolio diversification together with a professional management at low costs. Through the performed placements, this category of institutional investors has an important role in the capital market activation. The elaborated and implemented investment strategies have a significant impact both on the positive evolution of the financial assets of institutional investors, and on the relocation of investment under improvement conditions of the productivity-risk ratio on capital markets.

In such conditions, the 90's stand out through the explosive development of mutual funds. This fenomenon was especially felt in the United States, where the total value of mutual fundadministrated assets increased from \$1.6 trillions in 1992 to \$5.5 trillions in 1998, the equivalent of a 22.4% increase annual rate.

A similar dynamics experienced the global mutual funds, the managed assets doubled between 2000 and 2007, reaching \$25 trillions, as shown in Table 1.

Table 1. **Assets under Management by Institutional Investors**

	1995	2000	2005	2006	2007	2008	2009
				(In trillions of U.S. dollars)			
Institutional Investors	21.9	33.5	49.0	56.6	62.8	52.5	60.3
Investment funds[1]	6.3	12.1	18.2	21.5	24.9	20.6	24.0
Insurance companies	8.0	10.4	16.3	18.1	19.9	18.3	20.0
Autonomous pension funds	7.2	10.8	14.3	16.5	17.7	13.3	15.9
Other institutional investors	0.5	0.5	0.5	0.6	0.7	0.6	0.7
				(In percent of GDP)			
Institutional Investors	103.0	147.6	162.0	178.1	181.7	143.3	173.7
Investment funds[1]	29.8	53.4	60.3	67.8	72.1	56.3	69.2
Insurance companies	37.7	45.6	53.9	57.1	57.5	50.0	57.7
Autonomous pension funds	33.8	47.4	47.3	51.8	51.2	36.3	45.9
Other institutional investors	2.5	2.2	1.6	1.9	1.9	1.6	2.0

Sources: *"Global financial stability report, IMF, 2011,*

Note: Data based on the following 17 OECD countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Japan, Luxembourg, the Netherlands, Norway, Spain, Turkey, the United Kingdom, and the United States. The data may reflect some double-counting of assets, such as those owned by defined contribution pension funds and managed by investment companies.

[1] Investment funds include closed-end and managed investment companies, mutual funds, and unit investment trusts.

We can observe the fact that, during the financial crisis, the assets managed by the institutional investors decreased to $52.5 trillions at the end of 2008, to reach again $60.3 trillions at the end of 2009 (compared to the $72 trillions comprising the total resources).

If analyzed in structure, the institutional investors' classification shows a preservation of investment funds, which managed during financial turbulence $24 trillions, closely followed by the insurance companies with $20 trillions and the pension funds.

From the point of view of the GDP, the total managed assets increased to 180% of the GDP, between 1995 and 2007. But the financial crisis lead to the decrease to 143 % of the GDP at the end of 2008, the most important asset decrease being experienced by the pension funds (with assets mainly made up of shares).

In this context, which is the role of institutional investors in the propagation or preservation of turbulence on the capital market?

A potential answer is given by the study of Frazzini and Lamont related to the non-informed money (the placements of individual investors or retail) and intelligent money (the placements of institutional investors). The study shows that the individual investors' behaviour can affect the dynamics of exchange markets. Retail investors make wrong decisions, by following the historical performance of mutual funds, and the funds take advantage of it in order to issue new fund units and to draw important amounts from the market. Upon withdrawal of the individual investors from the fund, the investment fund will disinvest, thus contributing to the massive withdrawal of the amounts received from the exchange market retail investors. In this context, the mutual funds represent more than mere passive agents, their action having an important impact on the dynamics of the exchange markets.

The increased interest of individual investors for this type of investment lead to the quick development of the recorded mutual funds and of the total value of the managed assets. Thus, the USA still represent the country with the most institutional investors. The other important market players are represented by Japan, with 14%, in fall compared to 1995, when it owned 23% of the total assets managed by institutional investors, the United Kingdom, with 8%, France and Germany, each with 7%, and other countries, which reach a total of 19%.

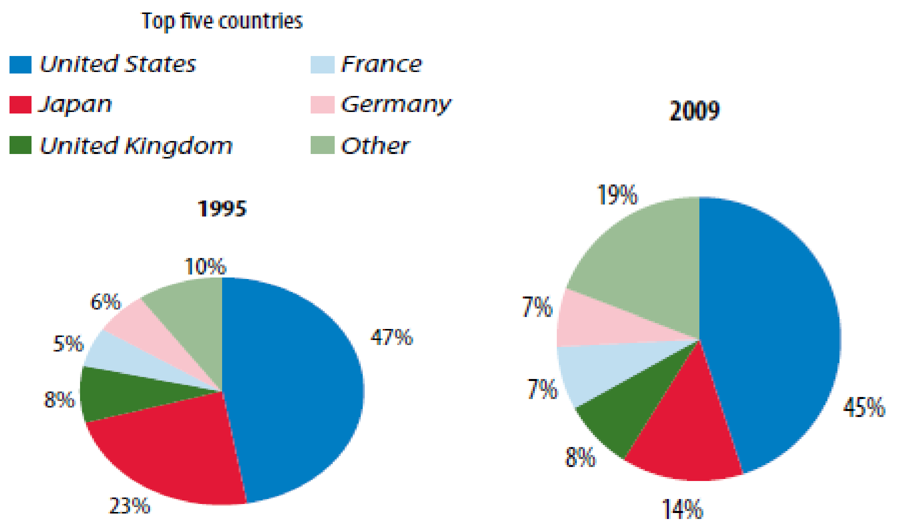

Figure 1.**Assets of Institutional Investor by Country**
(In percent of total assets under management)
Sources:*"Global financial stability report, IMF, 2011,*

Such empirical proofs allow us to state that there is a tendency for capital accumulation in big financial entities, with significant influence on the global exchange markets.

Several recent empirical studies discussed on the hypothesis according to which the international diversification of portfolios brings along increased output. Coval and Moskowitz (1999, 2001), Hau (2001), Dvorak (2005), Bae , Stulz and Tan (2005) reached the conclusion that the investors gain significantly bigger benefits from investments in the companies located in their close neighborhood, due to informational asymmetries which allow the easy access to information related on the autochthon financial instruments and their characteristics.

An empirical proof in confirmation of such opinions is the regional assignment of assets in case of institutional investors.

*Table 2.***Regional allocation (in percentages)**

	Asset Managers				Pension Funds			
	Bonds		Equities		Bonds		Equities	
	2006	2010	2006	2010	2006	2010	2006	2010
Own country of domicile	61.0	60.1	47.5	44.8	78.1	75.7	55.5	50.3
East Asia/Pacific	3.4	3.6	8.5	9.0	1.8	2.4	8.6	10.1
Europe	27.2	27.1	28.2	27.1	11.7	11.4	22.1	21.4
Latin America	0.8	0.8	1.8	2.6	0.3	0.9	0.8	2.5
Middle East/North Africa	0.1	0.2	0.2	0.3	0.0	0.3	0.2	0.4
North America	7.1	7.7	11.7	13.0	7.9	8.9	11.6	13.1
South/Central Asia	0.2	0.2	0.8	2.1	0.1	0.4	1.1	2.0
Sub-Saharan Africa	0.0	0.0	0.1	0.2	0.0	0.1	0.1	0.3

Sources: *"Global financial stability report", IMF, 2011,*

Upon a comparative analysis, the asset allocation on geographical regions before the global financial crisis (the year 2006) and during the crisis (the year 2010) we can observe the institutional investors' tendency to invest in their own countries or in their close neighborhood, both in terms of the fixed income instruments and the shares. The regulation characteristics and the prudential rules for risk diversification applying to the pension funds generated, during the period under analysis, a discrepancy of the portfolio structure compared to asset managers, a significantly higher percentage of placements being recorded, both in bonds (75.7% compared to 60.1% in 2010), and in equities(50.3% compared to 44.8% in 2010) in the institutional investor's country of origin.

The tendency to invest on emergent markets ceased during the financial crisis, the institutional investors performing massive capital withdrawals from the non G-7 regions in 2008, which encouraged the decreasing trend of emergent exchange markets.

One particular case, due to portfolio assignment, is represented by the pension funds, which experienced major changes during 2000-2010. In some countries, like Great Britain and the United States, the share investments represented during such period approx. 50% of the total placements, exposing such funds to significant losses in 2008 at the same time with the beginning of the current crisis. On the other side, the pension funds from Germany, Italy and Canada oriented their investments from shares to bonds. These strategies are justified by the introduction of more severe risk adjustment requirements.

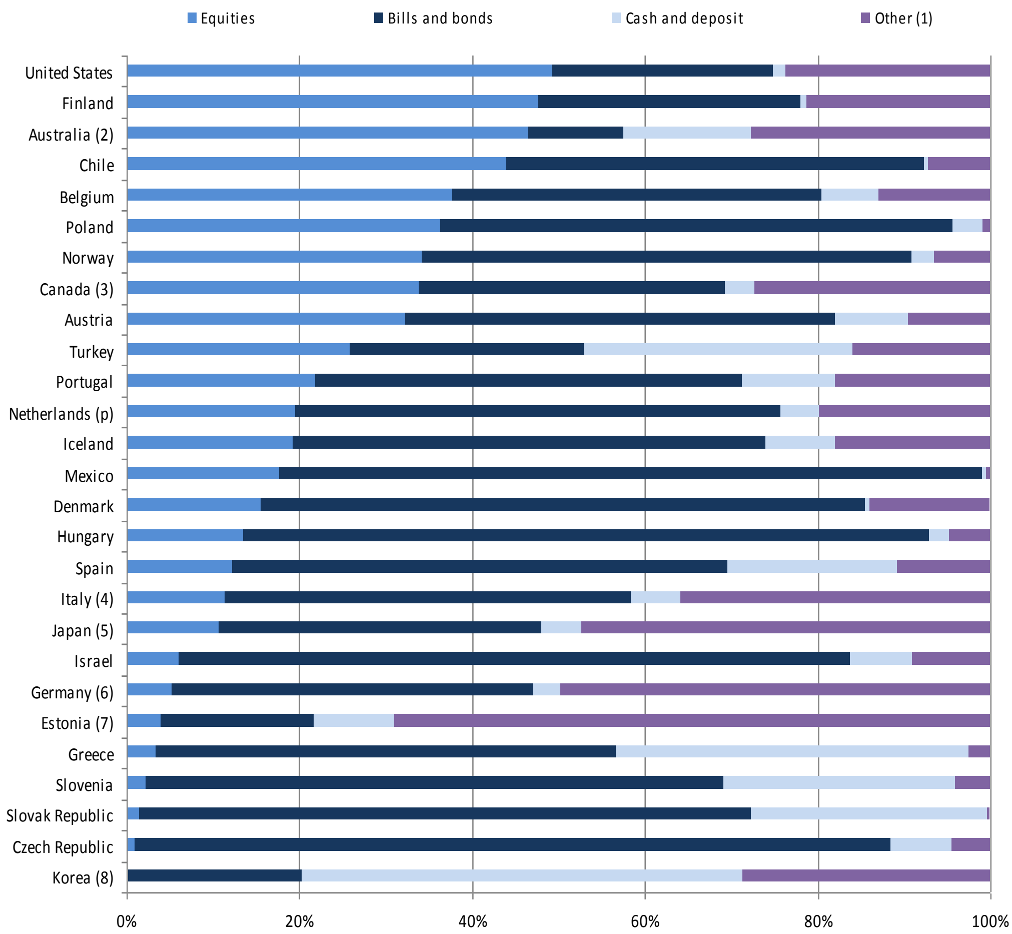

Figure 2. Pension fund asset allocation for selected investment categories in selected OECD countries, 2010

As a % of total investment

Source: OECD Global Pension Statistics, July 2011

Although the value of the pension fund managed assets in relation to the GDP is extremely high in some countries, according to their geographical distribution, we observe the dominance of pension funds from the United States, which, at the end of 2010, own approx. 55% of the total assets from the OECD countries' pension funds' portfolio, respectively $10.58 trillions. The next country in terms of total assets' value is the Great Britain, with an approx. percentage of 10%, respectively $1.94 trillions and Japan with approx. $1.3 trillions. We must underline the significant difference of the total investment value in the United States compared to the rest of the countries under study.

Table 3.**Geographical distribution of pension funds' assets in OECD countries, 2010**

As a % of total OECD

	Total assets	
	In millions of USD	In %
United States	10,587,679	55.2
United Kingdom (1)	1,943,110	10.1
Japan (2)	1,388,329	7.2
Netherlands (p)	1,056,769	5.5
Australia	1,089,723	5.7

Canada	1,017,672	5.3
Switzerland (3)	551,450	2.9
Other	1,541,740	8.0

Source: OECD Global Pension Statistics, July 2011

Note:1. OECD estimate.2. Source: Bank of Japan.3. Data refer to 2009.

The financial troubles experienced on the exchange markets determined the majority of the pension funds to diversify their investment strategies, including by means of the increase of placements in hedge funds. If traditionally the pension funds used to place the funds into shares or bonds which generated outputs correlated with the financial markets' dynamics, they reconsidered their investment strategy by looking for such investments which generated a plus compared to the market output (Stewart, 2007).

Thus, in 2011, the data show that approx. 16.5% of the global pension funds invested into speculative funds. However, the average percentage of investment allocation in speculative funds is placed between 5-10%.

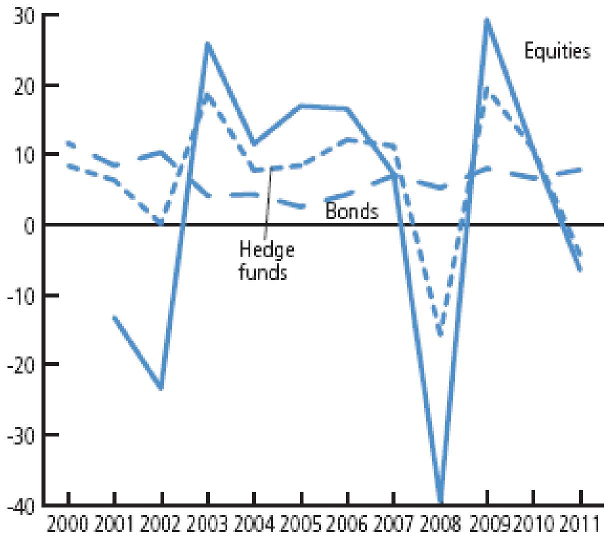

Figure 3. **Rate of return on assets worldwide**

Annual average % rate of return

Source: Greenwich Alternative Investments, S&P 500, Barclays, The CityUK, Pension Markets 2012

Investments in hedge funds became more and more attractive in the period before the current financial crisis because of the high return rates compared to other types of institutional investors.

The explanation lays in the fact that hedge fund investments significantly influence the evolution of capital markets, especially emergent markets, with a higher exposure compared to foreign investors. The lack of a strategic interest towards their holdings lead to important capital infusions or withdrawals on capital markets within a limited period of time, encouraging trends and generating periods of increased volatility.

Some authors, like Jacquillat(2008) consider that hedge funds had a determinant role in the beginning of the current crisis meanwhile others disagree with this hypothesis, arguing that the quantity of such funds is much more smaller than the one of the traditional investment funds, the losses experienced by the speculative funds being limited (Aglietta, Rigot, 2008).

Ever since 1990, the risk funds have represented one of the most rapid increase segments of the managed assets. The number of worldwide risk funds increased from 610 in 1990 to approx. 9.000, until the end of 2009.

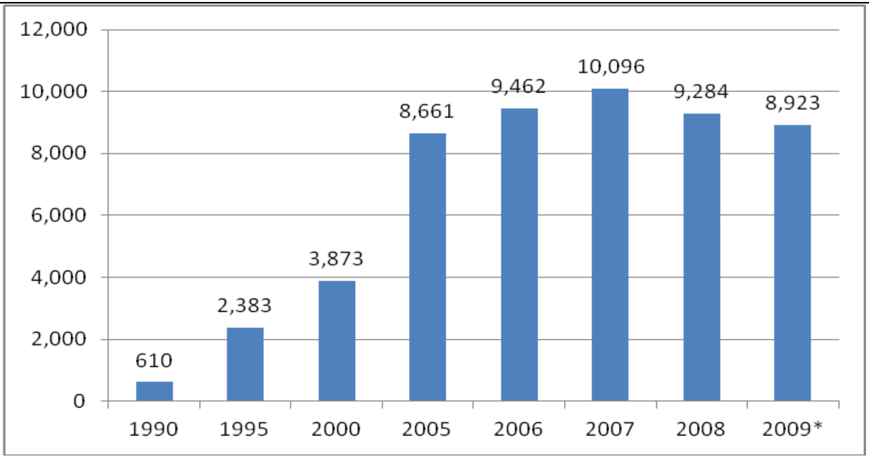

Figure 4. **Number of worldwide risk funds**
Source: *Hedge Fund Research, 2010*

Hedge funds represent a product of the financial globalization, since they allowed the implementation of arbitration strategies on liquid exchange markets. Thus, the possibility of short-term transactions was ensured, without the risk of counterparty upon closure of open items. (Sławiński, A, 2006)

Higher rates of return and fund drawing from other traditional investors contributed to the explosive increase and development of hedge funds. During 2000-2007, the total assets of speculative funds experienced an average annual increase of 27.27%. In 2008, under the impact of the current crisis, the hedge fund assets decreased by approx. $461 mld. because of investors' withdrawals and the suffered losses.

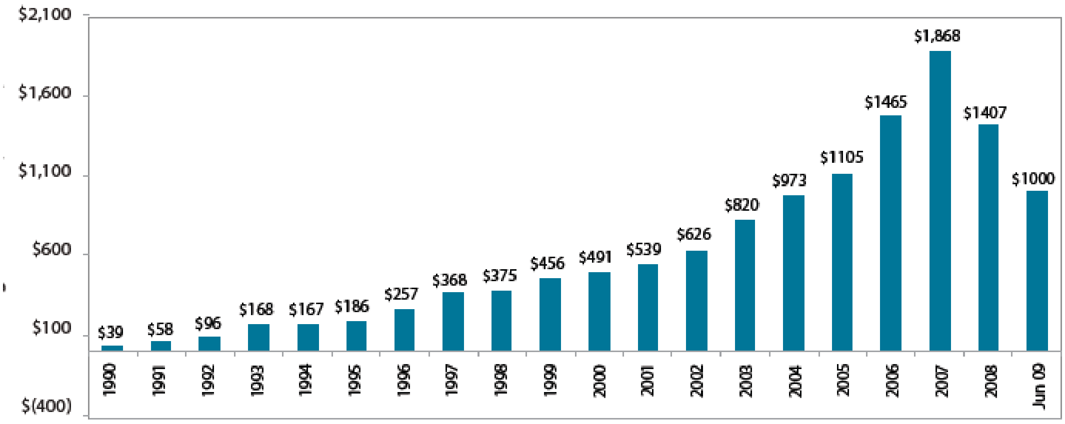

Figure 5. **Total Hedge Fund Assets**
Source: HFR Global Hedge Fund Industry Report, second quarter 2009. Hedge Fund Research, Inc., August 2009,

Presently, approx. 30% of the American exchange rate transactions are being performed by speculative funds, although their relevant portfolios only represent 5% of the total assets managed in the United States.

Conclusions

The removal of controls on capitals together with the decompartmentalization, deregulation, demediation and development of the financial innovation created the occurence of certain moments of instability on the financial markets, which influenced the strategies and behaviour of institutional investors.

Such important players on the capital market make a heterogeneous group, which uses different strategies to gain output in order to pull up important financial resources saved by the retail investors and to obtain a dominant position on the market.

Under conditions of capital flow increase, adjusted by the global financial crisis, the presented analysis and empirical proofs show a tendency of institutional investors' asset reallocation on developed markets and the withdrawal from the emergent ones.

The instability generated in the global financial system had immediate effects on all the portfolios of institutional investors, regardless of their classification category.

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