Virtual wealth is growing

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VIRTUAL WEALTH IS GROWING

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Abstract

The market price of a financial asset may not coincide with the value of the counterpart obligations in the balance sheet of the issuer of this asset. The difference between these values is an unsecured part of the asset's value, which forms financial bubbles and virtual wealth. Present article shows that the actually observed US unsecured virtual wealth has been growing since the 1980s amid cyclical fluctuations due to stock market volatility.

1. Introduction

Every financial asset has counterpart obligations (liabilities or equity) accounted on the financing side in the balance sheet of the issuer of this asset. The issuer of the bond undertakes to repay it at a certain date with the interest. The issuer of the shares provides their value by his own capital (corporate equity).

The value of a financial asset is equal to the value of corresponding obligations at the time of issue and primary offering,. However, this equality can be violated afterwards and it is violated in fact, if the securities' prices are set on modern electronic trading platforms. In this case the asset's market value loses its connection with the counterpart issuer's obligations. Shareholder value, for example, may not be equal to the own capital of the issuer of the equities. Indeed, changes in stock prices are not required to exactly correspond to the results of the economic activities of the issuing corporation. It may happen that the value of the equities has increased, while the own capital of the corporation has not changed, or changed to a lesser extent. In this case the issuing corporation "does not confirm" the increase in shareholder value by increasing its obligations. As a result, a part of the financial assets' value is not secured by the corresponding obligations; we consider this unsecured part as illegitimate. Our view about such illegitimacy is also confirmed by the statements contained in the 2008 SNA standards. In particular, according to p.2.58, "*financial asset and its liability counterpart have to be recorded for the same amount in the creditor and the debtor accounts*".

The unsecured part of the value of financial assets inflates bubbles in financial markets and forms the unsecured component of wealth of the owners of these assets. Many economists rightly consider this component as an illegitimate and virtual wealth negatively affecting the economy, see Bezemer & Hudson (2016); Fitoussi & Saraceno (2009).

At the same time a widespread opinion exists that unsecured fluctuations in the value of financial assets are a temporary deviations from the norm which associated with stock market volatility. And on average, securities' prices correspond to the "fair" secured level. Some supporters of this point of view believe that such deviations do not entail long-term consequences, and therefore they can be ignored (e.g., Solow, 2014).

Yet we show in this paper that this is not so, at least for the US economy. The unsecured part of financial assets really does experience cyclical fluctuations due to stock market volatility. However, simultaneously with the cyclical component, there is a monotonous increase in the unsecured value since the 1980s, which exceeded $ 11 trillion by 2016. Unidentified miscellaneous financial assets are mainly responsible for such growth.

We use FOF time series (Fed data) in this study. Two statistical releases from Sep 21, 2017 and Dec 20, 2019 considered separately. The data contained in these releases are very different from each other because of a change in methodology in 2019. However the unsecured component of financial assets' value differs slightly. Virtual wealth is growing rapidly in both cases.

2. FOF Statistical Release for Sep 21, 2017

It is generally believed that deviations in the value of financial assets from the obligations securing them are due to the volatility of market prices of shares.
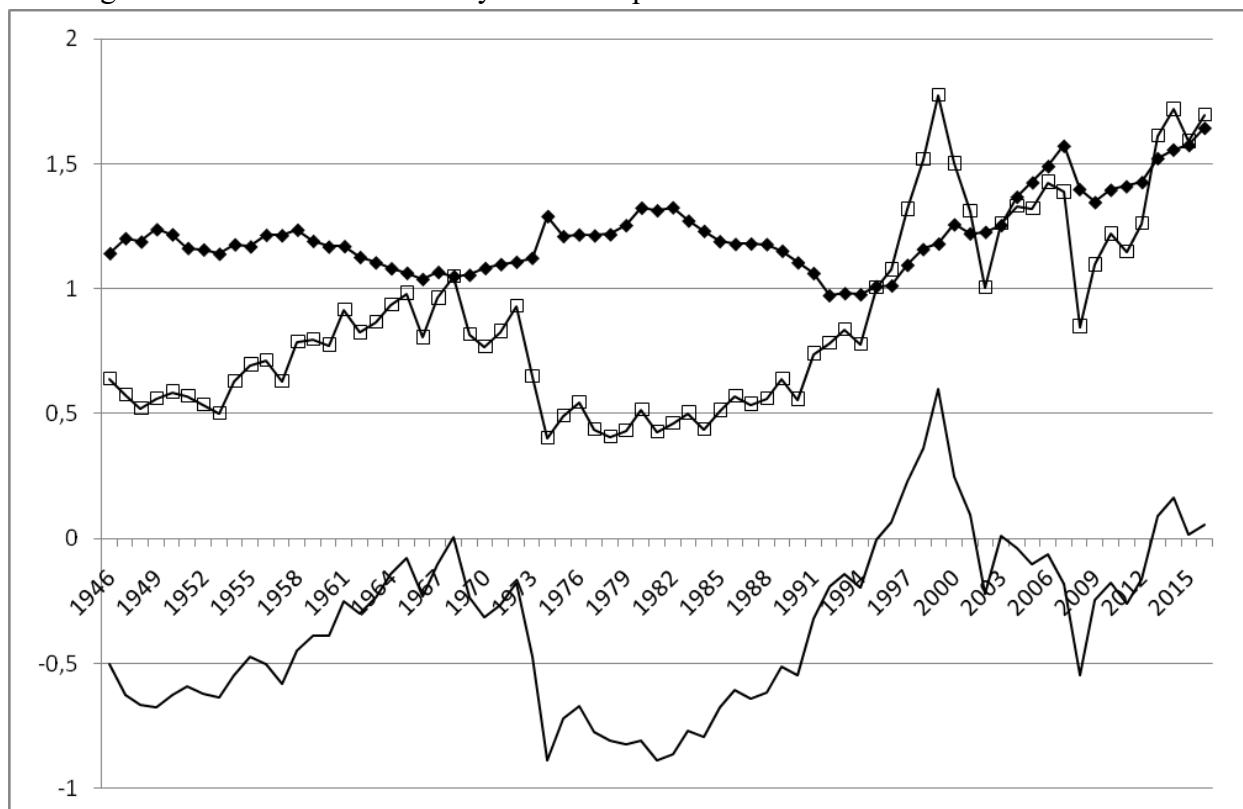

Fig 1 The total market shareholder value of US corporations (□); the aggregate net worth (own capital) of US corporations (♦); unsecured component of the shareholder value (line without marker) = [total market shareholder value (□)] minus [aggregate net worth (♦)]. All values are in GDP units. Data Sources are in Appendix A.

Indeed, Figure 1 shows significant discrepancies between shareholder value (□) and the corporations' own capital (♦). These discrepancies are predominantly cyclical rather than monotonous in nature, which apparently misled many economists.

Nevertheless, we have succeeded in the present paper to reveal a monotonously growing component of the unsecured value of financial assets, amid the cyclical component. We examined the entire aggregate of US financial assets, and calculated the aggregate amount of the unsecured part of their value (curve with a marker ● in Figure 2). The net financial assets (the difference between the total values of financial assets and liabilities) were summarized across all sectors of the US economy for this purpose. Monetary gold was excluded from consideration; this asset is commodity money, the value of which is provided directly by the value of gold. In addition, we subtracted the amount of the business equity (corporate and noncorporate) from the total net financial assets; these values are securing property rights to the business.
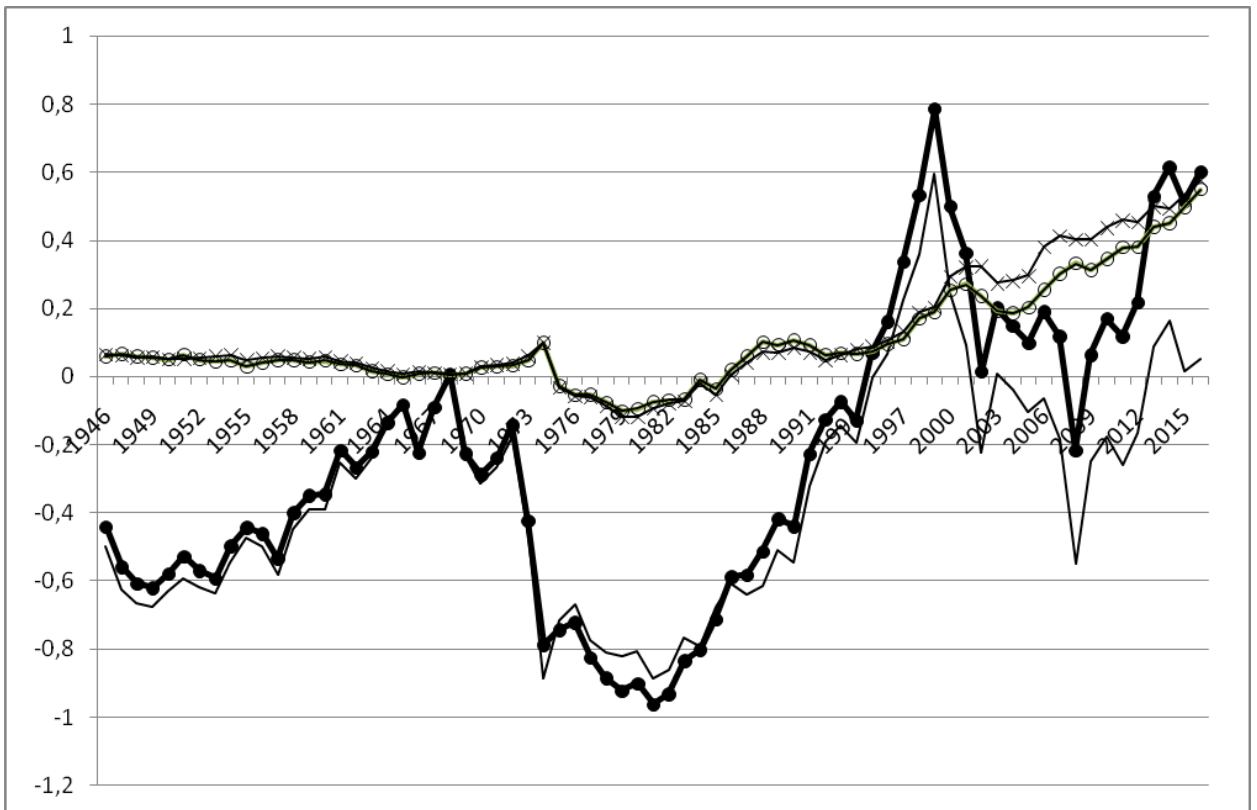
Fig 2 The aggregate amount of unsecured part of US financial assets (●); unsecured component of the shareholder value (line without marker, see Fig 1); the unsecured part of all US financial assets, excluding equities (○) = [aggregate amount of unsecured part of US financial assets (●)] minus [unsecured component of the shareholder value (line without marker)], the time series (○) coincides with the "instrument discrepancies" aggregated for all types of financial assets, except for equities and monetary gold; Unsecured part of unidentified miscellaneous financial assets' value (×). All values are in GDP units. Data Sources are in Appendix A.

If we exclude from the agregate unsecured value of financial assets (●) the volatile component (unsecured value of shares, a curve without a marker), then the difference (○) demonstrates monotonous growth since the 1980s; its value has been already exceeded 0.5 GDP in the US economy in 2016 (over 11 trillion dollars).

If we analyze what financial instruments are responsible for this difference, it turns out that almost all of them are so-called "unidentified miscellaneous financial assets" (line with marker ×, see Fig 2). This is quite unclear. Indeed, theoretically, for all financial instruments (except for equities), the difference between the securities' market price and the corresponding obligations should not arise at all. That is why such a difference is called "instrument discrepancies" in the FOF accounts.[1] However, the magnitude of such discrepancy is so large that it can hardly be interpreted as an error. Therefore, we are confident, that in fact the curve (×) in Figure 2 shows the growing amount of unsecured value of unidentified miscellaneous financial assets.

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[1] We calculated the sum of discrepancies for all financial instruments excluding gold and equities for verification. The resulting curve completely coincides with the curve with a marker (○), see Fig 2. This is quite natural, because we calculate the same variable in two different ways.

And who owns and who issues such assets? It turns out that the most of unidentified miscellaneous assets and liabilities belong to nonfinancial corporations.[2] It seems that enterprises in this sector are heavily involved in financial speculation, which can significantly distort their own capital value.

3. FOF Statistical Release for Dec 20, 2019

The graphs in Fig. 1 and 2 were built on the basis of FOF statistics for Sep 21, 2017. To our surprise, the latter release (for Dec 21, 2019) shows a completely different picture, due to the changes in methodology that occurred in 2019.[3] However, as will be shown below, the unsecured part of the financial assets' value (and of unsecured wealth) is failed to be hidden. Moreover, the analysis casts doubt on the accuracy of the FOF statistic regarding the valuation of assets, liabilities and net worth of nonfinancial corporations.
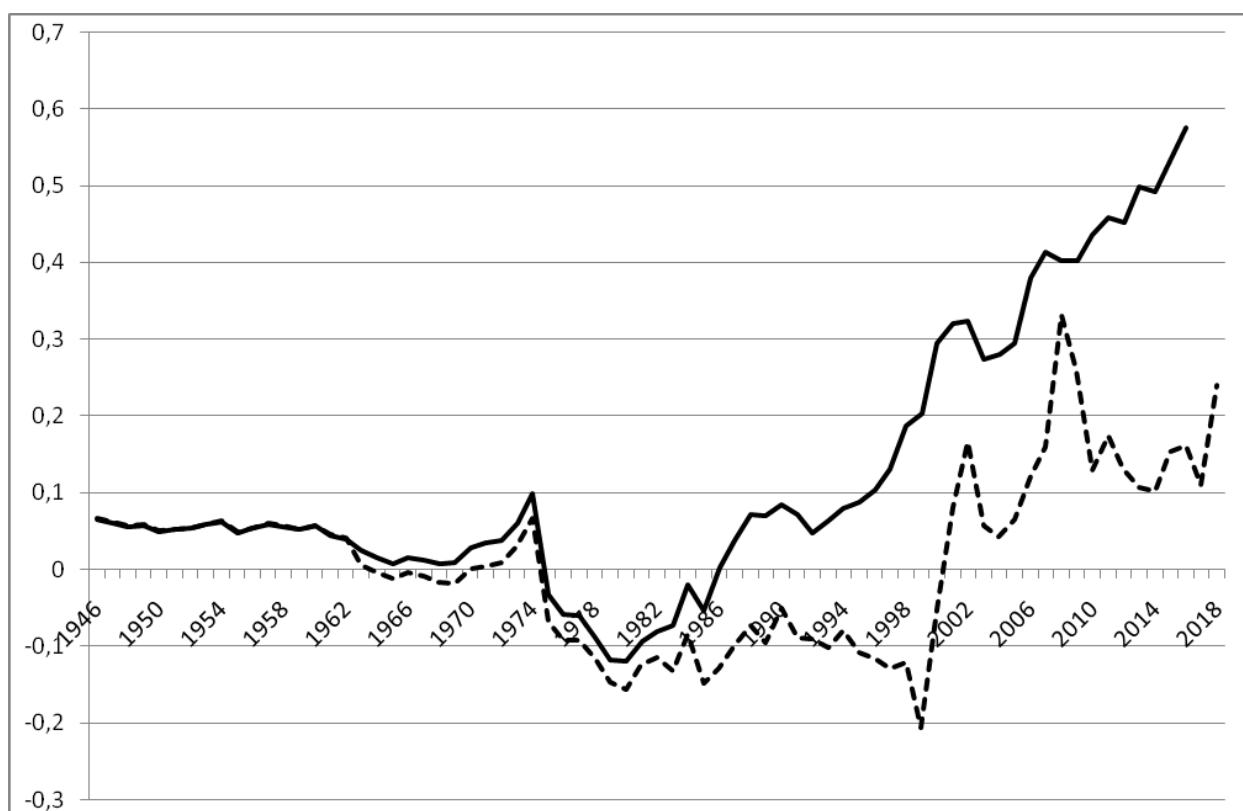

Fig 3 USA The difference between the total value of US unidentified miscellaneous financial assets and the liabilities securing them (instrument discrepancy), in GDP units: in accordance with the release for Sep 21, 2017 (solid line) and in accordance with the release for Dec 20, 2019 (dashed line). Data Sources are in Appendix A.

The first impression that the new data making is: FOF specialists drew attention to the rapidly growing unsecured part of the value of unidentified miscellaneous financial assets (which is discrepancy), and decided to rectify the situation.

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[2] This is evidenced by the time series FL893193005.A; FL103193005.A; FL893093005.A; FL103093005.A in FOF table L234 (unidentified miscellaneous assets and liabilities).

[3] FOF September 2019 release: *The nonfinancial corporate sector (tables F.103, L.103, B.103, and R.103) has been revised from 2010:Q1 forward based on improved methodology using data from the IRS Statistics of Income and Census Quarterly Financial Report.*

Indeed, the release for Dec 20, 2019 demonstrates a dramatic decrease of the "instrument discrepancy" for the unidentified miscellaneous financial assets, see Fig. 3. As we noted above, most of these assets and liabilities are in the balance sheet of nonfinancial corporations. Then the net worth of nonfinancial corporations has decreased one and a half times, see Fig. 4, simultaneously with the reduction of the instrument discrepancy, shown in Fig. 3.
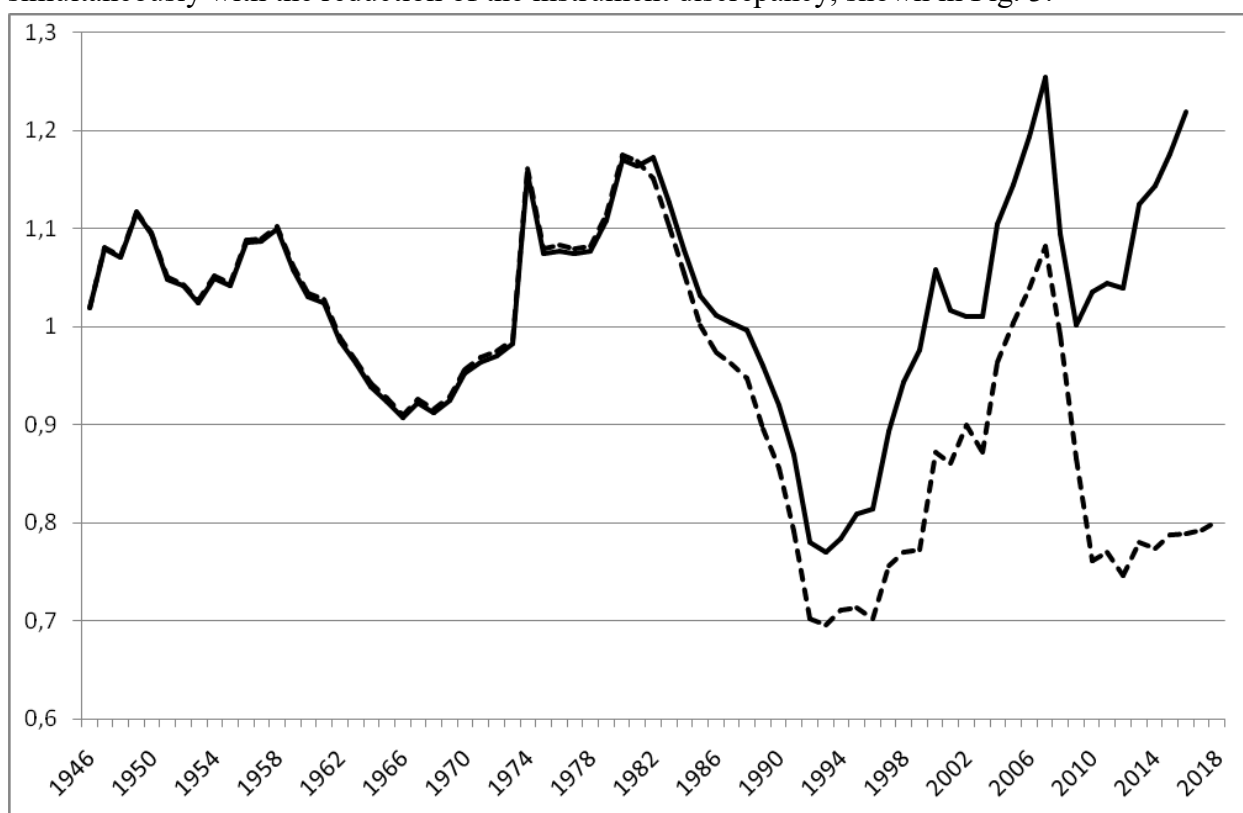

Fig 4 The aggregate own capital of US nonfinancial corporations in units of GDP: according to the release of Sep 21, 2017 (solid line), and according to the release of Dec 20, 2019 (dashed line). Data Sources are in Appendix A.

This is rather suspicious, after all US corporations are required to undergo an annual audit to confirm their assets and liabilities. Their own capital is valuated based on these data. It turns out that the audit data could not be trusted, and the equity of nonfinancial corporations was 1.5 times overstated.[4]

At first glance it may seem (see Figure 3) that the reform in the methodology for calculating the value of financial assets and liabilities have changed (in this case, reduced) the amount of unsecured wealth. But this is not so. Decreasing in one place, it simultaneously increased in another. The difference between the shareholder value of nonfinancial corporations and their net worth increased by the same amount, and even a little more, due to the decrease in the net worth of these corporations. The unsecured wealth, initially concentrated in the unsecured value of miscellaneous financial assets, did not go away, but moved to the shareholder value of nonfinancial corporations.

As a result, the total value of unsecured financial assets has not changed significantly, see Fig. 5. Unsecured virtual wealth is growing, regardless of the measurement methodology.

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[4] Note that the growth of equity of nonfinancial corporations is mainly not due to profit, saving and investment, but due to revaluations of their assets, see Table R103 FOF.
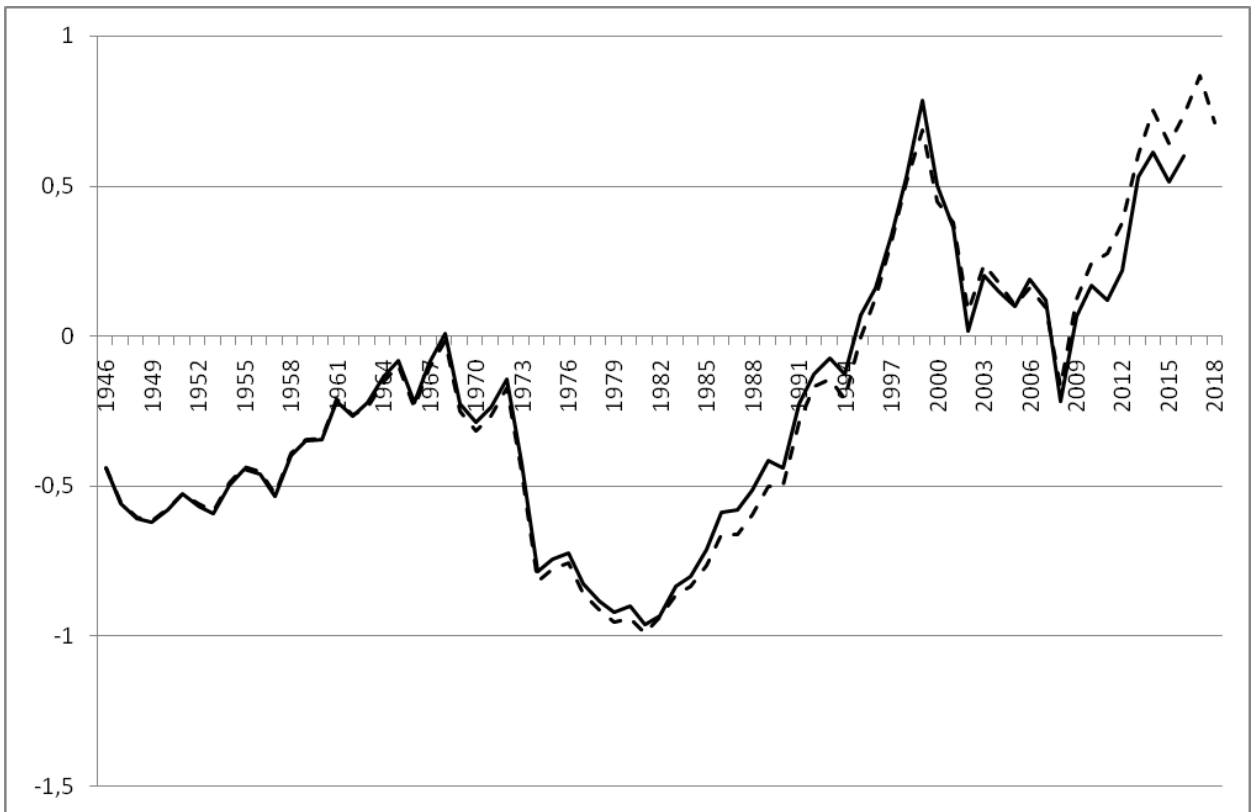
Fig 5 The total value of unsecured part of US financial assets in units of GDP: according to the release of Sep 21, 2017 (solid line), and according to the release of Dec 20, 2019 (dashed line). Data Sources are in Appendix A.

4. Conclusion

The common point of view is questioned in this article, about the exclusively cyclical nature of deviations of the value of financial assets from the corresponding obligations in the balance sheet of issuers of these assets. FOF statistics indicate growing unsecured component of the financial assets' value. The unidentified miscellaneous financial assets are largely responsible for this growing component. In addition, simultaneous analysis of both FOF releases (Sep 21, 2017 and Dec 20, 2019) revealed circumstances that cast doubt on the accuracy of the valuation of assets, liabilities and equity in the balances of nonfinancial US corporations.

The growth of the unsecured component of financial assets means inflation of financial bubbles and the growth of unsecured virtual wealth of the owners of such assets. In our opinion, it is the growth of the unsecured portion of wealth that explains the growth of wealth in units of GDP observed by many economists, for example Piketty & Zucman, 2014. Exactly the virtual component of wealth is growing.

The growth of unsecured wealth entails catastrophic consequences for the economy. As the study shows (Yashin, 2020), such growth is a sufficient condition for increasing inequality, which in turn entails a slowdown in economic growth and impoverishment of the poorest households.

Appendix A Data Sources

All the numerical data presented in this paper are the result of the calculations done by the author by using the data that can be retrieved from the:

— Flow of Funds Accounts of the United States (FOF); Z.1, Statistical Release for Sep 21, 2017 & Statistical Release for Dec 20, 2019; http://www.federalreserve.gov .

The annual calendar year time series at current prices are used. All inventory values are presented at the end of the reporting period.

A brief description of data used for plotting graphs (Figures 1-5) is provided below, indicating the names and codes of the original data series.

Designations and abbreviations used:

Gross domestic product, FA086902005.A:	*Y*
Sectors:	
Domestic business	*DB*
Households and nonprofit organizations:	*HN*
Nonfinancial corporate business:	*NFCB*
Nonfinancial noncorporate business:	*NFNCB*
Domestic financial sectors:	*FB*
General government:	*GnG*
Rest of the world:	*RW*
Other abbreviations:	
Instrument discrepancies	*ID*

Fig 1 The total market shareholder value of US corporations (□); the aggregate net worth (own capital) of US corporations (♦); unsecured component of the shareholder value (line without marker) = [total market shareholder value (□)] minus [aggregate net worth (♦)]. All values are in GDP units.

♦	{[*NFCB*; net worth FL102090005.A]+[*FB*; nonfinancial assets LM792010095.A] + [*FB*; total financial assets FL794090005.A]–[*FB*; total liabilities FL794190005.A]}/*Y*
□	[*DB*; corporate equities; liability LM883164105.A]/*Y*

Fig 2 The aggregate amount of unsecured part of US financial assets (●); unsecured component of the shareholder value (line without marker, for data sources see Fig 1); the unsecured part of all US financial assets, excluding equities (○) = [aggregate amount of unsecured part of US financial assets (●)] minus [unsecured component of the shareholder value (line without marker)]; the time series (○) coincides with the "instrument discrepancies" aggregated for all types of financial assets, except for equities and monetary gold; Unsecured part of unidentified miscellaneous financial assets' value (×). All values are in GDP units.

●	{([*HN* total financial assets FL154090005.A]-[*HN* total liabilities FL154190005.A]) + ([*NFCB* total financial assets FL104090005.A]–[*NFCB* total liabilities FL104190005.A]) + ([*NFNCB* total financial assets FL114090005.A]-[*NFNCB* total liabilities FL114190005.A])+ ([*FB*; total financial assets FL794090005.A]– [*FB*; total liabilities FL794190005.A]) + ([*GnG* total financial assets FL364090005.A]–[*GnG* total liabilities FL364190005.A]) + ([*RW* total financial assets FL264090005.A]–[*RW* total liabilities FL264190005.A] –

	[RW;foreign corporate equities LM263164103.A]) – [NFNCB: Proprietors' equity in noncorporate business LM112090205.A]– ([NFCB; net worth FL102090005.A]+ [FB; nonfinancial assets LM792010095.A] + [FB; total financial assets FL794090005.A]– [FB; total liabilities FL794190005.A]) – [FdG Monetary gold FL313011205.A]– [Monetary authority; monetary gold FL713011203.A]}/Y
○	{[ID; Treasury currency FL903012005.A]+ {[ID; private foreign deposits FL903091005.A] +[ID; net interbank transactions FL904010005.A]+[ID; checkable deposits and currency FL903020005.A]+[ID; federal funds and security repurchase agreements FL902050005.A] +[ID; trade receivables FL903070005.A]+[ID; taxes receivable FL903078005.A]+[ID; total (unidentified) miscellaneous assets FL903090005.A]}/Y
×	[ID; total (unidentified) miscellaneous assets FL903090005.A]/Y

Fig 3 USA The difference between the total value of US unidentified miscellaneous financial assets and the liabilities securing them (instrument discrepancy), in GDP units: in accordance with the release for Sep 21, 2017 (solid line) and in accordance with the release for Dec 20, 2019 (dashed line). [*ID*; total unidentified miscellaneous assets FL903090005.A]/*Y*

Fig 4 The aggregate own capital of US nonfinancial corporations in units of GDP: according to the release of Sep 21, 2017 (solid line), and according to the release of Dec 20, 2019 (dashed line). [*NFCB*; net worth FL102090005.A]/*Y*

Fig 5 The total value of unsecured part of US financial assets in units of GDP (for data sources see line with marker ● in Fig 1): according to the release of Sep 21, 2017 (solid line), and according to the release of Dec 20, 2019 (dashed line).

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