Analysis of The Stock Market and Macroeconomic Indicators for The Emerging Market in Hungary

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Abstract

Over the last few decades, Hungary has had a trajectory similar to the other emerging markets of the European Union from a diplomatic and political point of view, with similar prizes of the economic and financial environment. This paper analyzes the most important indicators of the capital market and macroeconomics, in order to study the correlations, but also the differences recorded by them. Through a comparative analysis of the indicators, it is highlighted the decisive moments, as well as the causal factors that determined the inflection points of the studied indicators, identifying their similarities with the behavior of the other European states.

Key words: macroeconomic indicators, capital market indicators, Hungary
J.E.L. classification: F30, F40, F63

1. Introduction

Hungary is one of the former communist countries whose political, economic and social path after 1989 has followed a similar course. The premises from which Hungary started its integration with the European Union was similar to other former communist states, but over the three decades, the internal decisions and fiscal policies adopted brought differences between these trajectories. In2004, Hungary officially joined the European Union, and in 2007 they became member of the Schengen area. According to the FTSE Russell classification currently, Hungary is one of Europe's emerging markets, along with Romania, Greece and the Czech Republic.

In the present work it is highlighted by a comparative analysis of the evolution of the Hungarian market both at the macroeconomic level and from the perspective of the capital market, finding common points but also differences between the two advances.

2. Literature review

The specialized literature approaches the subject of the interdependence of the capital market and the macroeconomic environment in several aspects, in the context of the phenomena of globalization and deglobalization, which determine the integration of the economic and financial markets.

We note that the academic environment has developed in recent years the studies on this interaction, including in empirical studies indicators such as the system of national accounts, the indicator of real progress, the cost-benefit analysis or the net economic well-being. These adaptations of the specialized literature are due to the degree of complexity of the economic and financial mechanisms, which impose new approaches on statistical calculations and theoretical-conceptual ideas.

These changes, however, do not underestimate the importance of classical indicators, which quantify and analyze capital markets and the macroeconomic environment. We exemplify through recent papers, which base their studies using indices such as GDP (Li and Leung, 2021), consumer price index (Barakat, etc., 2015 and Camilleri, 2019) or market capitalization (Wahba, etc., 2022).

3. Research methodology

This paper is a comparative study, in which the stock market and the macroeconomic state of Hungary are analyzed in parallel. In the framework of this descriptive analysis, a series of indicators representative of the two areas studied were selected, that reflect the characteristics of the market (Troto, 2020).

Thus, for the interpretation of the evolution of the stock markets, the following indicators were selected:

- the value of the shares traded
- market capitalization
- number of domestic companies listed on the stock exchange
- shares traded in relation to the turnover of domestic shares

In order to analyses Hungary at its macroeconomic level, the following indices were selected:

- GDP per Capita
- Evolution of GDP
- Consumer Price Index
- Foreign direct investment, net inflows
- Current account balance

In order to study the evolution of the indicators as a whole and to be able to draw valid conclusions, the paper approaches a long-term vision, taking into account a time interval of twenty years, between 2000-2020.

4. Findings

In the analysis of the indicators recorded by Hungary, we note that the period of the years 2004-2007 of the economic boom was clearly reflected in the index of the values of the traded shares.

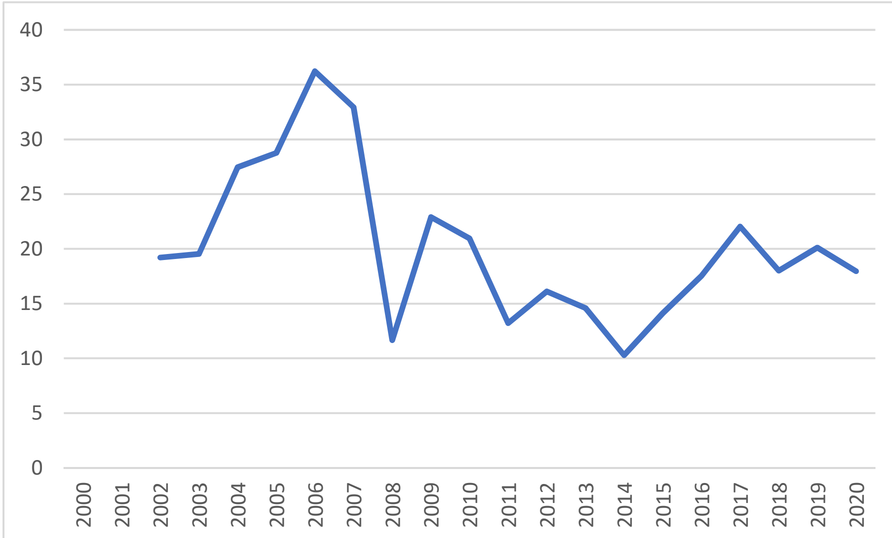
Figure no. 1. Total value of the shares traded in Hungary (billions US$)

Source: Author processing, data from www.worldbank.org

But the sudden upward evolution, which many analysts considered artificial. As a result, it is not surprising the involution that the index has recorded in the following years.

It is worth mentioning that in the period 2013-2020, the total traded value was relatively constant, in our opinion this development can be explained by the much more cautious behavior of investors, as a result of the experience of the economic crisis, but also by fiscal policies whose role was to stabilize the capital flow and strengthen the financial markets.

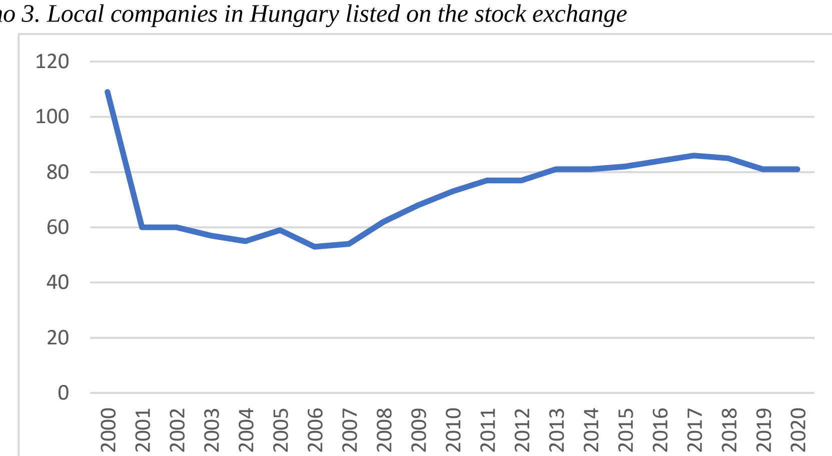
Figure no. 2. Market capitalization of listed Hungarian domestic companies (% of GDP)



Source: Author processing, data from www.worldbank.org

Analyzing the activity of domestic companies on the Hungarian capital market, we can see that their number is relatively constant, even if the capitalization index recorded significant inflections. Even if a sudden decrease was suffered in 2007-2008, the market capitalization of domestic companies registers a significant increase in 2009, which we do not notice in the other stock index indicators analyzed, but this optimistic evolution was not preserved in the following years. The stock market capitalization index stabilized in 2017-2020.

Figure no 3. Local companies in Hungary listed on the stock exchange

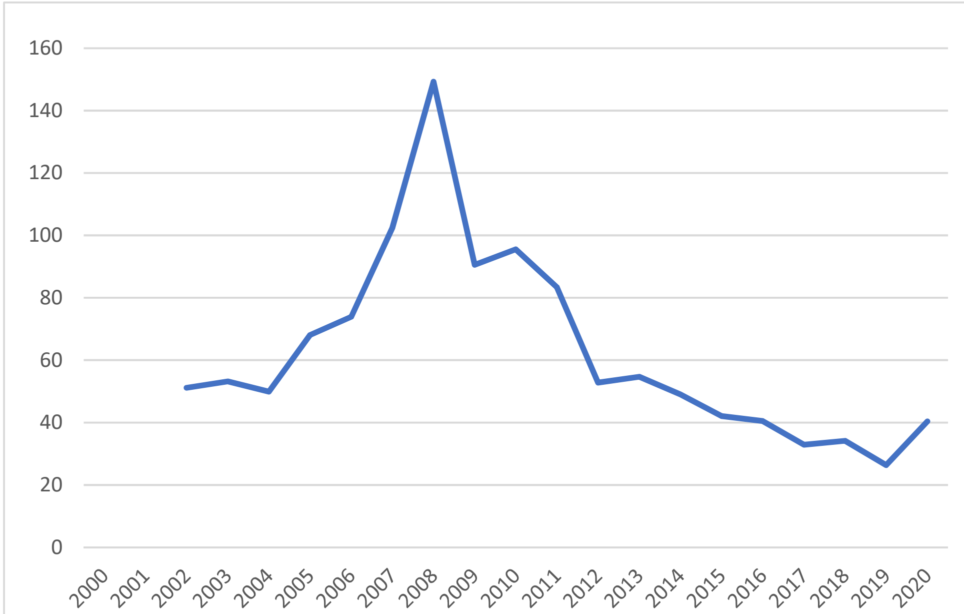


Source: Author processing, data from www.worldbank.org

The percentage index of the shares traded in relation to the turnover of domestic shares in Hungary had a similar evolution to the total value of the shares, from which we conclude that there was a direct correlation between these indicators, demonstrating a balance between the capital market indices.

We can also note that between 2012 and 2019, the report recorded a slight steady decrease. Correlating this fact with the positive evolution of the total value of shares in 2016-2018, we conclude that the turnover of domestic companies had an upward trend.

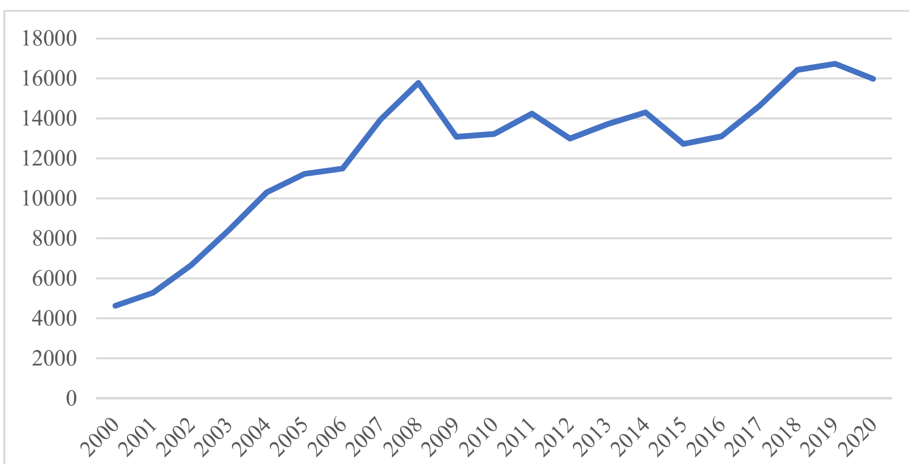
Figure no. 4. Shares traded in Hungary, in relation to the turnover of domestic shares (%)



Source: Author processing, data from www.worldbank.org

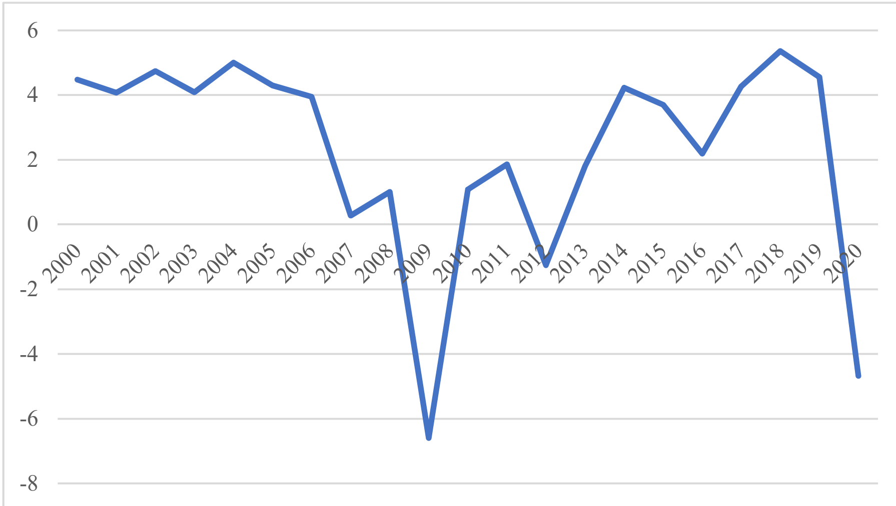
Analyzing the indices of gross domestic product, respectively GDP per capita and the percentage evolution of GDP, we can observe an obvious correlation of them, observing two clear periods of evolution, namely the years 2005-207 and 2016-2019. We believe that Hungary's macroeconomic indices have been influenced by the economic crisis to a certain extent, but their recovery has not been quick, and the stabilization and re-entry of significant growth can only be noted after 2016.

Figure no. 5. GDP per Capita in Hungary (US$)



Source: Author processing, data from www.worldbank.org

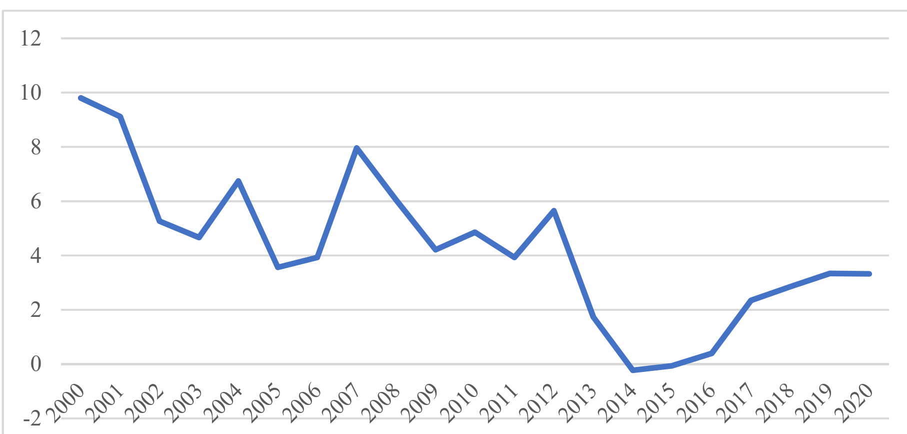
Figure no. 6. Evolution of GDP in Hungary (% annually)



Source: Author processing, data from www.worldbank.org

We also consider that this upward trend can also be explained by the increase in inflation of the aforementioned period, which makes us to conclude that 2016-2019 was a period clearly favorable to the standard of living and the development of the business environment. Analyzing the consumer price index in the period 2000-2020, we note that it recorded uneven values, between -0.2% and 9.8%. We also note that the general trend was downwards in the period 2000-2014, followed by a linear upward evolution.

Figure no. 7. Hungarian consumer price index (% yearly)

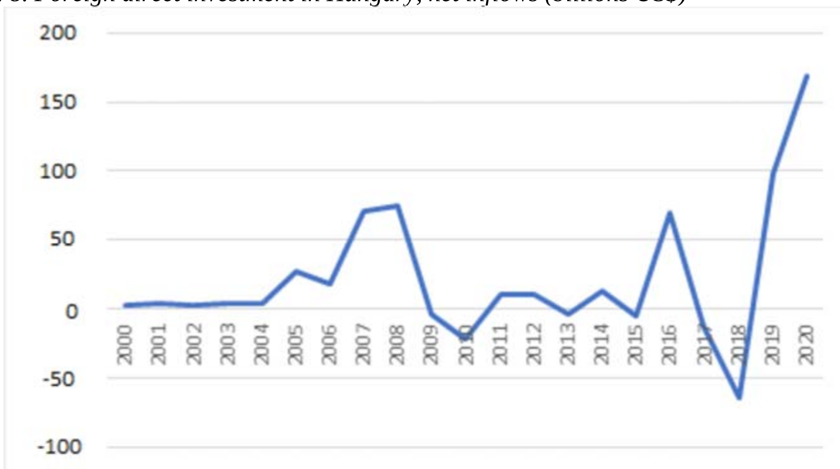


Source: Author processing, data from www.worldbank.org

From our point of view, it should be noted the atypical evolution of the index that culminates in the recording of sudden inflation before the financial crisis, following that the price of the consumer index in the years of crisis will remain high, but below the critical level reached in 2007. In the context of the present work, the purpose of which is to correlate several macroeconomic indicators, we consider it necessary to justify these deviant values that can generate anomalies.

Deepening the evolution of this indicator, we can see that Hungary's inflation was very volatile in the period 2002-2007 and mainly reflected the evolution of food and fuel prices, amplified also by changes in fiscal policies, which changed the level of taxes. As a result, the depreciation of the forint has led to a rapid increase in inflation since the second quarter of 2006. Higher food price inflation has led to a new rise in inflation since the last quarter of 2007, reaching an average annual value of 7.9%.

Figure no. 8. Foreign direct investment in Hungary, net inflows (billions US$)

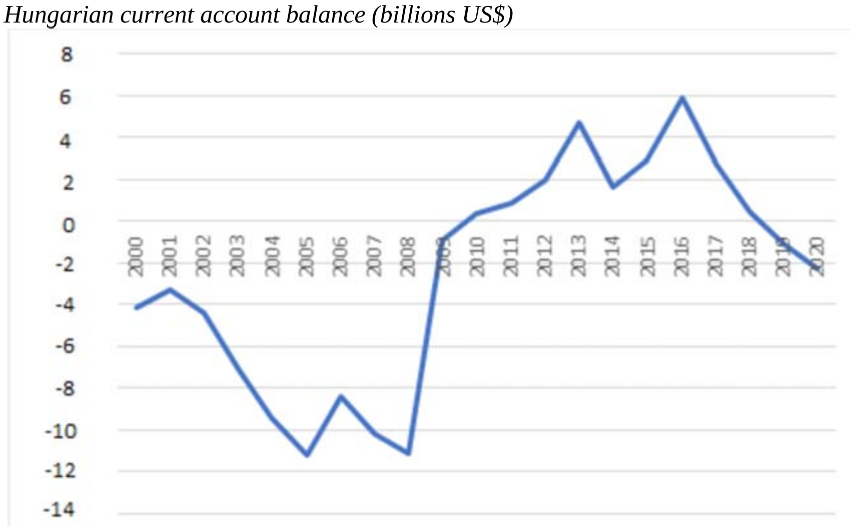


Source: Author processing, data from www.worldbank.org

Foreign direct investment experienced a relatively equal evolution in the period 2000-2007, having an important inflection point in the period 2007-2008, which from this point of view had a favorable trend, despite the economic crisis. In the last four years under review, this indicator has had significant fluctuations. We note that, once again, during the Covid-19 crisis, this indicator did not suffer, on the contrary, 2018-2020 were years when direct investments in Hungary recorded a special ascent. In my view, this behavior of the international investment market is due to government intervention.

In our opinion, the evolution of stock indices was influenced by the establishment in 2008 of the Keler Group, which played a decisive role in the evolution of the monetary and capital markets in Hungary, its purpose being to outsource the activity of clearing the risks and implicitly of protecting the National Bank and the Budapest Stock Exchange. Moreover, Keler CCP was involved in 2016 in compensation services for gas transactions in Romania as well, renewing the financial guarantee system and alignment with European standards. Thus, we believe that the integration of the Keler Group into the zonal economy of South-Eastern Europe has played an important role in the stability and correlation of economies, as well as in the integration of the regional market.

Figure 9. Hungarian current account balance (billions US$)



Source: Author processing, data from www.worldbank.org

Hungary's current account balance recorded a period of deficit between 2000 and 2009, with the post-crisis recovery bringing the indicator to positive values. Analyzing the evolution of this indicator, we conclude that we cannot notice an obvious link between the evolution of the current account and the capital market indicators. We note, however, that after a decade in which Hungary recorded a surplus, in 2020 the indicator registers a negative value. In our opinion, this deficit cannot be justified strictly in the light of the health crisis, noting that the downward trend started in 2016.

5. Conclusions

As a result of the study above, we find that the major international events that have influenced the economy at global and regional level have also affected Hungary, but the level of impact and the recovery period differ from one indicator to another. In arguing this observation, we exemplify by the financial crisis of 2008, at which time Hungary recorded decreasing values of the analyzed indicators, having the same behavior as the other European markets, but there were also inflections of the indicators that depended on the internal context. Thus, in our opinion, the emerging markets of the European Union have had an independent evolution, without being able to notice some clear patterns of behavior of the indicators. On the other hand, we note that this market has been influenced by the overall course of the developed markets of the European Union, as well as by the policies implemented at EU level.

As far as the stock markets are concerned, we conclude that the Hungarian stock market is characterized by a high level of volatility, being influenced by internal factors independent of the evolution of the stock exchange. However, we note that in the long run, the capital market was severely affected by the 2008 crisis, its recovery capacity not being sufficiently viable to bring back the value of the traded shares or the market capitalization to the level recorded in 2006-2007.

6. References

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